Water Security Agency

June 20, 2016

306.694.3954

Mr. Robert Nelson
Chief Engineer, International Bureau
Federal Communications Commission (FCC)
445 12th Street SW
WASHINGTON DC 20554

File: HGS-DCS-01

Dear Mr. Nelson:

Re: FCC Public Notice RM-11681

I am writing this letter in response to the public notice (RM-11681) seeking comments on an application by a private cellular communications company to share a frequency that is to be used for the GOES DCS satellite receiver system.

This is to let you know that we use GOES DCS satellite system for the collection of surface water data in real-time from over 250 remote data recording sites located across the Province of Saskatchewan. This data helps the Province forecast and respond to floods and drought, and is used in all scales of infrastructure projects.

The data collected from the GOES DCS satellite system is critical to the flood control operation of the Souris Basin Project under the 1989 International Agreement between the Government of Canada and the Government of the United States of America. The operation of Souris Basin reservoirs in Saskatchewan has direct impact in emergency management related floods for cities and towns located in north central North Dakota. For example, one of the key objectives of the flood control operation under this International Agreement is to provide 1-percent (100-year) flood protection in Minot, North Dakota. Furthermore, the collected data is also very important for the accurate and timely calculation of flows apportionment in the Missouri River Basin, which benefits the State of Montana.

According to the public notice, the petitioning company seeks to share the 1675-1680MHz bandwidth for proposed cell tower to handset communications. The downlink frequency of the GOES Data Collection Platform Reports (DCPR), which is the frequency at which the DCP data will be streamed back to earth from the GOES-R series satellites, is 1679.7-1680.4 MHz.

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GOES-R and S satellites, replacing the current GOES East and West units, are scheduled to start coming on line in 2017. Therefore, if there is significant interference at the primary NOAA and USGS receive sites, and this is a real possibility, this would degrade the performance of the GOES DCS system in our real-time data collection system.

The petitioning cellular company has submitted technical studies arguing that cell antennas will not degrade GOES DCPR performance if the antennas are located at specified distances from satellite downlink sites. However, tests by other contractors indicate that cell tower transmissions within the targeted frequencies would likely drown out the much weaker satellite signals. There is a real risk of degradation of GOES DCS reception should these cell towers come online.

Currently, we do not have any alternatives available to continue receiving the data and services through other means. Any degradation of GOES DCS reception will have significant impact in water resources management and flood control operations of Saskatchewan. Therefore, I request you to consider aforesaid emergency management functions during the decision making process of spectrum allocation.

Thanks for your time and consideration. I look forward to continuing a conversation with the Commission about the challenges to spectrum usage in the US or Canada. If you have any questions or require further information, please do not hesitate to contact me.

Respectfully submitted,

John Fahlman
Vice-President, Technical Services
Technical Services Division

JF/IB/ce